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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,491	09/23/2003	Robert Sheffield	57983.000131	1242
7590	05/04/2006		EXAMINER	
Thomas E. Anderson Hunton & Williams LLP 1900 K Street, N.W. Washington, DC 20006-1109			VAN, LUAN V	
			ART UNIT	PAPER NUMBER
			1753	

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No.	Applicant(s)	
	10/667,491	SHEFFIELD ET AL.	
	Examiner Luan V. Van	Art Unit 1753	

–The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

THE REPLY FILED 27 April 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) The period for reply expires _____ months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because

- (a) They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) They raise the issue of new matter (see NOTE below);
- (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. Applicant's reply has overcome the following rejection(s): _____.

6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

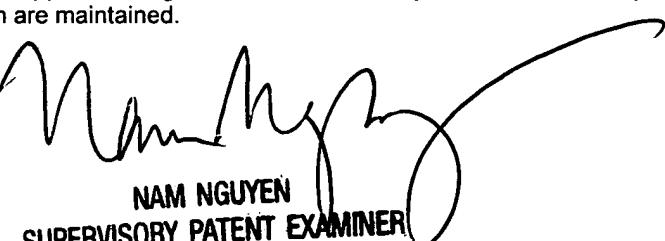
11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.

12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____

13. Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because:

With respect to the restriction, the applicant argues on page 3 that the restriction is appropriate only if two or more independent and distinct inventions are claimed in one application. The examiner respectfully disagrees. MPEP 803 states: "Under the statute, the claims of an application may properly be required to be restricted to one of two or more claimed inventions only if they are able to support separate patents and they are either independent (MPEP § **> 802.01, § 806.06, and § 808.01<) or distinct (MPEP § 806.05, § *>806.05(j)<)". The MPEP does not require that the claims to be independent and distinct but only that they are either independent or distinct. Therefore the restriction is proper and is thus made final. With respect to the argument on page 5-6 that Tanaka et al. fail to teach the limitation of "so as to improve performance of a signal transmitted via the conductive circuit trace," the examiner acknowledges that this is not explicitly stated by Tanaka et al. However, the performance of a signal transmitted via the conductive trace is inherently improved, since Tanaka et al. use the same method, i.e. reducing a surface roughness (column 2 lines 23-35) of at least one surface of the conductive circuit trace on the surface of the circuit board layer, as that of the instant claim. With respect to the method of polishing, Tanaka et al. teach reducing the surface roughness includes mechanical polishing the at least one surface (column 4 lines 59-64) as recited in claim 2; the argument on page 7 omitted this method. With respect to the roughness, Tanaka et al. teach the surface roughness of the at least one surface is reduced to no more than 3 μ m (median surface roughness), and a maximum surface roughness of no greater than 18 μ m (column 2 lines 23-35), which is within the range of the instant claims. This teaching is in contradiction to applicant's argument on page 8 that this is a minimum roughness. No more than 3 μ m is interpreted to be equal to or less than 3 μ m, and therefore would be a maximum acceptable roughness. Finally, Tanaka et al. teach at least one surface of the conductive circuit trace includes one of a group consisting of: a surface parallel and distal to a surface of the circuit board; a surface parallel and proximal to the surface of the circuit board; and a surface perpendicular to the surface of the circuit board (see figure 1). The response to arguments over Taylor et al. '528 and Ozeki et al. have been presented in the previous office action. Applicant's arguments have been fully considered but they are not persuasive. Therefore, all rejections from the previous office action are maintained.



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